

IN THE CLAIMS

Please amend claims 15 and 29 and add claims 34 through 38, as follows:

1 1. (Original) A lock, comprising:

2 a housing bearing an interior recess containing a pair of axially aligned and spaced
3 apart detents, said housing being positionable to control access by alternately assuming a locked state
4 and an unlocked state;

5 a mechanism removably insertable within said recess, said mechanism comprising:

6 a single annularly wound coil of insulated wire forming a circular cylinder
7 surrounding a central axially oriented bore, said wire terminating in a single pair of leads
8 with axially opposite base ends of said coil being perforated by said bore;

9 a pair of armatures each exhibiting a distal end, said armatures being made
10 of a material that is movably responsive to magnetic force, and being slidably positioned at
11 axially opposite ends of said bore, in coaxially aligned axial opposition; and

12 means coaxially aligned with said armatures, biasing both of said armatures
13 to extend said distal ends axially outwardly beyond axially opposite base ends of said coil;

14 said housing holding said mechanism with said bore being axially aligned between
15 said detents, with said detents providing simultaneous engagement of different ones of said distal
16 ends and maintaining said locked state; and

17 said distal ends both withdrawing axially away from said engagement and towards

18 said bore to place said lock in said unlocked state in response to application of a potential difference
19 across said pair of leads.

1 2. (Previously Presented) The lock of claim 1, further comprised of said coil forming an air
2 vent extending between
3 a central portion of said bore and an exterior surface of said mechanism.

1 3. (Previously Presented) The lock of claim 1, with said biasing means comprised of a
2 spring interposed between said armatures within said bore.

1 4. (Previously Presented) The lock of claim 1, with said biasing means comprising:
2 a first spring interposed between said distal end of a first one of said armatures and
3 one extremity of said coil, and
4 a second spring interposed between said distal end of a second one of said armatures
5 and an opposite extremity of said coil.

1 5. (Previously Presented) The lock of claim 3, further comprised of said coil forming an air
2 vent extending between a central portion of said bore and an exterior surface of said mechanism.

1 6. (Previously Presented) The lock of claim 4, further comprised of said coil forming an air
2 vent extending between a central portion of said bore and an exterior surface of said mechanism.

1 7. (Previously Presented) The lock of claim 1, further comprised of said housing providing
2 a cavity having a longitudinal axis and an interior surface, and said detents comprising a plurality
3 of slots formed within said interior surface on diametrically opposite sides of said interior surface.

1 8. (Previously Presented) The lock of claim 1, further comprised of:
2 said housing providing a cavity having a longitudinal axis and an interior surface, and
3 said detents comprising a plurality of slots formed within said interior surface on diametrically
4 opposite sides of said interior surface; and
5 said mechanism comprising a cylinder plug removably receivable within said cavity
6 to rotate about said longitudinal axis, with said coil and said armatures borne by said cylinder plug
7 in radial alignment with said slots while said housing is in said locked state, and said distal ends
8 being withdrawn from said slots while said housing is in said unlocked state.

1 9. (Previously Presented) The lock of claim 8, further comprised of said coil forming an air
2 vent extending between a central portion of said bore and an exterior surface of said mechanism.

1 10. (Previously Presented) The lock of claim 8, further comprised of said distal ends being
2 beveled.

1 11. (Previously Presented) The lock of claim 1, further comprised of:

2 said housing providing a first bracket having a pair of spaced-apart end walls forming
3 a cavity having a longitudinal axis, and said detents comprising a plurality of apertures formed
4 within said end walls on diametrically opposite sides of said cavity; and

5 said mechanism comprising a second bracket bearing said coil and said armatures to
6 be slidably received within said cavity between said end walls with said armatures being aligned with
7 said longitudinal axis, with said distal ends engaging said end walls and said armatures being
8 depressed into said bore until said housing is placed in said locked state when said armatures are in
9 axial alignment with said apertures, said distal ends being withdrawn from said apertures and toward
10 said bore while said housing is in said unlocked state.

1 12. (Previously Presented) The lock of claim 11, further comprised of said coil forming an
2 air vent extending between a central portion of said bore and atmosphere.

1 13. (Previously Presented) The lock of claim 11, further comprised of said distal ends being
2 beveled.

1 14. (Previously Presented) The lock of claim 13, further comprised of said coil forming an
2 air vent extending between a central portion of said bore and atmosphere.

1 15. (Currently Amended) A lock, comprising:

2 a housing bearing an interior recess containing a pair of spaced apart detents, said

housing being positionable to control access by ~~alternatively~~ alternately positioning said detents in a locked state and an unlocked state; and

a single annularly wound electrically conducting coil terminated by a single pair of leads; and

a pair of armatures made of a material that is movably responsive to magnetic force, being slidably positioned to axially reciprocate relative to opposite ends of said coil between said detents, with one or both of said armatures maintaining said locked state by engaging corresponding ones of said detents, and placing said lock in said unlocked state in response to application of a potential difference across said pair of leads.

16. (Previously Presented) The lock of claim 15, further comprised of said coil forming an air vent extending between a central portion of said bore and an exterior surface of said mechanism.

17. (Previously Presented) The lock of claim 15, further comprised of said coil forming an air vent extending between a central position of said coil.

18. (Previously Presented) The lock of claim 15, further comprised of said housing providing a cavity having a longitudinal axis and an interior surface, and said detents comprising a plurality of slots formed within said interior surface on diametrically opposite sides of said interior surface.

19. (Previously Presented) The lock of claim 15, further comprised of:

2 said housing providing a cavity having a longitudinal axis and an interior surface, and said
3 detents comprising a plurality of slots formed within said interior surface on diametrically opposite
4 sides of said interior surface; and

5 a cylinder plug removably receivable within said cavity to rotate about said longitudinal axis,
6 with said coil and said armatures rotatably borne by said cylinder plug in radial alignment with said
7 slots while said housing is in said locked state, and said armatures being withdrawn from said slots
8 while said housing is in said unlocked state.

1 20. (Previously Presented) The lock of claim 15, further comprised of:

2 said housing providing a first bracket having a pair of spaced-apart end walls forming
3 a cavity having a longitudinal axis, and said detents comprising a plurality of apertures formed
4 within said end walls on diametrically opposite sides of said cavity; and

5 a second bracket bearing said coil and said armatures to be slidably received within
6 said cavity between said end walls with said armatures being aligned with said longitudinal axis,
7 with distal ends of said armatures engaging said end walls and said armatures being depressed into
8 said bore until said housing is placed in said locked state when said armatures are in axial alignment
9 with said apertures, said distal ends being withdrawn from said apertures and toward said bore while
10 said housing is in said unlocked state.

1 21. (Previously Presented) A lock, comprised of:

2 a solenoid comprising:

3 an electrically conducting coil conducting an electrical current around a bore;

4 and

5 a plurality of armatures positioned to exhibit a response to conduction of an
6 electrical current by said coil;

7 a first one of said plurality of armatures being coaxially aligned within said
8 bore with a second one of said plurality of armatures to exhibit an increased outward force axially
9 away from said coil when an inward force directed axially toward said coil is applied to said second
10 one of said plurality of armatures during an absence of said conduction.

1 22. (Previously Presented) A lock, comprised of:

2 a coil disposed to conduct an electrical current around a bore; and

3 a plurality of armatures positioned in coaxial alignment within said bore to
4 operatively respond to conduction of said electrical current by said coil, with a first one of said
5 plurality of armatures being biased outwardly and away from said coil when a force biasing a second
6 one of said armatures inwardly toward said coil is applied to said second one of said armatures
7 during an absence of said conduction.

8 23. (Previously Presented) The lock of claim 10, further comprised of a check valve
9 operationally controlling passage of air via said air vent.

1 24. (Previously Presented) The lock of claim 13, further comprised of:

2 said lock providing a vent extending between said bore and an exterior of said

1 housing; and

2 a check valve operationally controlling passage of effluent via said vent.

1 25. (Previously Presented) The lock of claim 19, further comprised of:

2 said lock providing a vent extending between said bore and an exterior of said
3 housing; and a check valve operationally controlling passage of effluent via said vent.

1 26. (Previously Presented) The lock of claim 20, further comprised of:

2 said lock providing a vent extending between said bore and an exterior of said
3 housing; and a check valve operationally controlling passage of effluent via said vent.

1 27. (Previously Presented) The lock of claim 21, further comprised of:

2 said lock providing a vent extending between said bore and an exterior of said
3 housing; and a check valve operationally controlling passage of effluent via said vent.

1 28. (Previously Presented) The lock of claim 15, further comprised of:

2 said detents being coaxially aligned and spaced apart
3 at least one deformable member positioned to bias distal ends of said armatures to
4 reciprocate axially relative to axially opposite base ends of said coil; and
5 said housing holding said coil aligned between said detents
6 to accommodate relative movement of said coil between alignment of corresponding ones of said
7 armatures and said detents as said lock alternates between said locked state and said unlocked state.

1 29. (Currently Amended) ~~The A lock of claim 21, further~~ comprised of:

2 a housing bearing an interior recess containing coaxially aligned and spaced apart
3 detents, said housing being positionable to control access by alternately assuming a locked state and
4 an unlocked state;

5 ~~said an electrically conducting coil forming a circular cylinder surrounding said bore,~~
6 said coil terminating in a single pair of electrical leads with axially opposite base ends of said coil
7 being perforated by said bore;

8 ~~said a plurality of~~ armatures each exhibiting a distal end, and being slidably
9 positioned at axially opposite ends of said bore, in coaxially aligned radial opposition;

10 ~~at least one deformable a~~ member biasing said ~~distal ends of said~~ armatures to
11 reciprocate through said ~~axially opposite base ends bore~~; and

12 said housing holding said core with said bore being axially aligned between said
13 detents, to accommodate interaction between different corresponding ones of said distal ends and
14 said detents alternating between said locked state and said unlocked state.

1 30. (Previously Presented) The lock of claim 22, further comprised of:

2 a housing bearing an interior recess containing a pair of axially aligned and spaced
3 apart detents, said housing being positionable to control access by alternately assuming a locked state
4 and an unlocked state;

5 said coil comprised of electrically insulated wire surrounding said bore, said wire
6 terminating in a single pair of leads;

7 said armatures each exhibiting a distal end and being made of a material that is
8 movably responsive to magnetic force, and being slidably positioned at axially opposite ends of said
9 bore, in coaxially aligned radial opposition; and

10 at least one deformable member biasing said armatures to reciprocate said distal ends
11 axially through said opposite base ends of said coil; and

12 said housing holding said coil with said bore being axially aligned between said
13 detents, to accommodate interaction between different corresponding ones of said distal ends and
14 said detents alternating between said locked state and said unlocked state.

1 31. (Previously Presented) The lock of claim 28, further comprised of:

2 said lock providing a vent extending from between said pair of armatures; and
3 a check valve operationally controlling passage of effluent via said vent.

1 32. (Previously Presented) The lock of claim 29, further comprised of:

2 said lock providing a vent extending from said bore; and
3 a check valve operationally controlling passage of effluent via said vent.

1 33. (Previously Presented) The lock of claim 30, further comprised of:

2 said lock providing a vent extending from said bore; and
3 a check valve operationally controlling passage of effluent via said vent.

1 34. (New) A lock, comprised of:

2 an assembly comprising a first structure movably embracing a second structure;

3 one of said first structure and said second structure bearing at least one detent;

4 a second of said first structure and said second structure bearing a solenoid providing

5 a bore and a plurality of armatures positioned to exhibit a response to conduction of an electrical

6 current by said coil, with a first one of said plurality of armatures being aligned with a second one

7 of said plurality of armatures to exhibit an increased outward force axially away from said coil when

8 an inward force directed axially toward said coil is applied to said second one of said plurality of

9 armatures during an absence of said conduction.

1 35. (New) The lock of claim 34, comprised of said plurality of armatures being coaxially

2 aligned within said bore.

1 36. (New) A lock, comprised of:

2 a housing bearing at least one detent;

3 an insert movable received within said housing, said insert bearing:

4 a solenoid surrounding a bore; and

5 a plurality of armatures positioned in axial opposition within said bore to

6 exhibit axially opposite movement relative to said bore in response to flow of an

7 electrical current through said coil;

8 with said insert engaging said detent and obstructing movement of said insert
9 relative to said housing in dependence upon said flow.

1 37. (New)The lock of claim 36, comprised of said plurality of armatures being coaxially
2 aligned within said bore.

1 38: (New) A lock, comprising:
2 a single annularly wound electrically conducting coil terminated by a single pair of
3 leads;
4 a housing containing a pair of spaced apart detents, said housing being positionable
5 to control access by alternately engaging said detents in a locked state and an unlocked state; and
6 a pair of armatures slidably positioned to axially reciprocate between said detents,
7 with one or both of said armatures maintaining said locked state by engaging corresponding ones of
8 said detents, and placing said lock in said unlocked state in response to application of a potential
9 difference across said pair of leads.